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ABSTRACT

Materials contained in this instructional module are designed to assist the elementary classroom teacher in gaining the necessary skills for developing a career education unit of work. The module is structured around four enabling objectives: (1) Correctly construct a goal statement, (2) correctly construct a behavioral objective, (3) define goal, behavioral objectives, activities, and evaluation as they relate to a unit of work, and (4) given an occupational area, generate in writing a career education unit of work, complete with goal, behavioral objectives, activities, and evaluation. This module is individualized and contains study questions for each enabling objective. Sections include pre-assessment tests preceding instructional activities designed to achieve the enabling objectives. A complete module post-assessment is presented at the conclusion of the module. Answer keys for selected study questions and post-assessment are included. (TA)

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A MODULE FOR TRAINING ELEMENTARY CLASSROOM TEACHERS IN THE DEVELOPMENT OF A CAREER EDUCATION UNIT OF WORK

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PROSPECTUS

PREFACE

Career Education has, in the past few years, had more of an impact upon the public educational system than any of its innovative predecessors. Almost every school system at every level is beginning to "get in the act." As a classroom teacher, undoubtedly you will be involved with the concepts of Career Education.

This instructional module is designed to assist you, as a classroom teacher, in gaining the necessary skills for developing a Career Education unit of work.

Upon completion of this module, you will be able to

1. correctly construct a goal statement, including the three major components.

2. correctly construct a behavioral objective, including the three major components.

3. define each of the following as they relate to a unit of work: goal, behavioral objectives, activities and evaluation.

4. given an occupational area, generate, in writing, a Career Education unit of work, complete with goal, behavioral objectives, activities and evaluation.

MODULE DIRECTIONS AND FLOWCHART

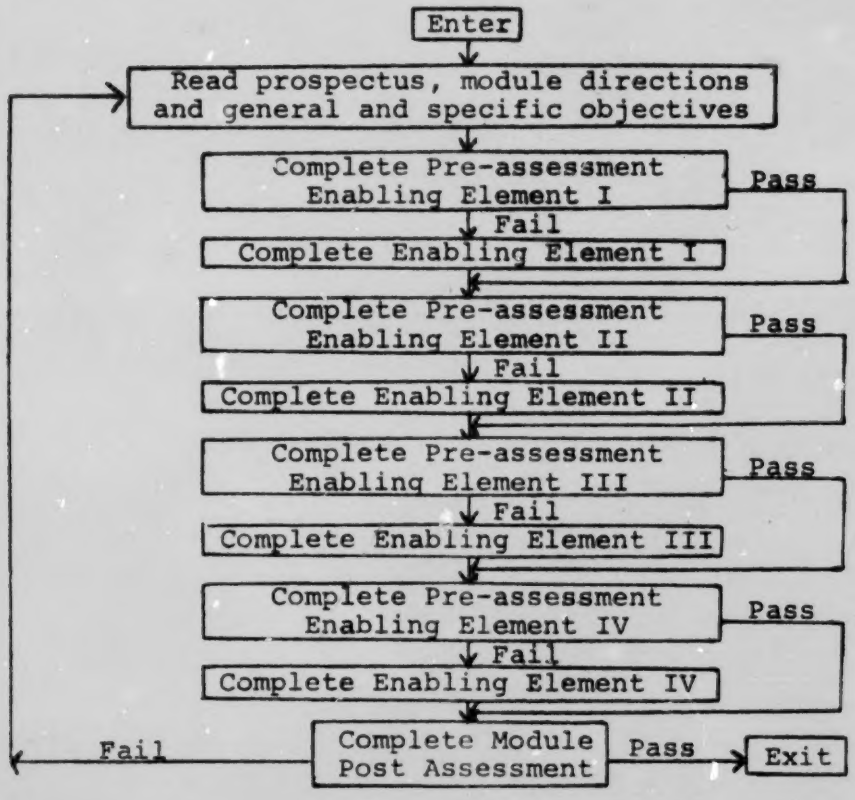
This module is separated into four enabling elements each of which includes a pre-assessment.

The module is individualized; that is, the learner may work at his own speed, spending more time in areas in which he is weak and less in areas in which he is strong.

Each module contains study questions. Answers for these questions are provided on pages 78-82.

The learner should check with the trainer if assistance is needed.

A score of 80% on the post-assessment is necessary for successful completion of the module.



GENERAL OBJECTIVE

You can generate, in writing, a career education unit of work.

SPECIFIC OBJECTIVES

You will:

1. correctly construct a goal statement, including the three major components.

2. correctly construct a behavioral objective, including the three major components.

3. define each of the following as they relate to a unit of work: goal, behavioral objectives, activities and evaluation.

4. given an occupational area, generate, in writing, a Career Education unit of work.

PRE-ASSESSMENT AND DIAGNOSTIC SELF-TESTS

DIRECTIONS

On this page are four questions which cover the objectives of this module. After completing the test items for an enabling element, check your answers with those provided in the answer sheet.

ENABLING ELEMENT I

GOAL STATEMENTS

Identify each of the following goals as either appropriate (A) or inappropriate (I) by circling the correct letter. For each goal you select as inappropriate, rewrite the statement so that it is appropriate.

A or I 1. To develop the necessary skills for adding mixed numbers.

A or I 2. To assist the student in gaining the necessary skills for reconditioning a four cycle engine.

A or I 3. To develop in the Occupational Specialist an awareness of the relationship between a counselor and counselee.

A or I 4. To assist in developing the ability to subtract.

ANSWER SHEET FOR ENABLING ELEMENT I

QUESTION	CORRECT ANSWER
1.	I
2.	A
3.	A
4.	I

#1, rewritten: To develop in the student the necessary skills for adding mixed numbers.

#4, rewritten: To assist the student in developing the ability to subtract fractions.

INTERPRETATION

If you correctly answered all four questions, it is not necessary that you complete Enabling Element I, though it will reinforce your skills in this area.

If you did not correctly answer all four questions, you should complete Enabling Element I.

ENABLING ELEMENT I

OBJECTIVE

The objective of this enabling element is: "You will correctly construct a goal statement, including the three major components."

In order to meet this objective, you should complete the following activity.

INSTRUCTIONAL ACTIVITY

Read and study "Goals", pages 7 through 9 of this module. Complete the study questions on pages 10 through 13 of this module.

"GOALS"

GOAL

A statement of general instructional intent.

A correctly written goal must contain the following three components.

A. The behavioral domain or area - reflects the type of behavior that is being requested of the learner.

Example: to add; to recognize; to become aware of; to develop an appreciation for; to generate.

B. The psychological object(s) involved - refers to the recipient or learner.

Example: student; teacher; occupational specialist.

C. The program variable - refers to that aspect of the curriculum to which the student is being exposed.

Example: whole numbers; sentence structure, the American Heritage.

The competency to which this module refers is "developing a Career Education unit of work." If we were to rewrite this as a goal statement, it might read like this: "To develop in the classroom teacher the ability to write a Career Education unit of work." In this goal, the

behavioral domain or area would be "to write" the

psychological object(s) involved would be "classroom teacher" and the

program variable would be "a Career Education unit of work."

The goal, "To assist the ninth grade student in learning to multiply fractions" would have the following components:

behavioral domain or area - multiply

psychological object(s) involved - ninth grade students

program variable - fractions

A goal, then, must be written so that it states the type of behavior (behavioral domain or area) that is being requested of the learner (psychological object(s) involved) on a particular concept (program variable).

EXAMPLES

b.d. - behavioral domain or area

p.o. - psychological object(s) involved

p.v. - program variable

1. To improve the (motor skill abilities) in (physical fitness) of the (student).
   b.d. p.v. p.o.

2. To develop in the (student) the ability to (operate) (power driven saws).
   p.o. b.d. p.v.

3. To develop in the (student) an (appreciation) for (Democracy as a form of government).
   p.o. b.d. p.v.

4. To assist the (student) in learning to (recognize) (incorrect sentence structure).
   p.o. b.d. p.v.

5. To develop in the (teacher) the ability to (relate) with the (disadvantaged child).
   p.o. b.d. p.v.

6. To develop in the (elementary child) (p.o.) an (awareness) (b.d.) of (selling as a career) (p.v.).

7. To develop in the (math student) (p.o.) the skills required for (computing) (b.d.) (three dimensional problems in volume) (p.v.).

Goals

A goal states type of behavior (behavioral domain) that is being requested of the learner (psychological object) involved in a particular concept (program variable).

Example:

	psychological object	behavioral domain
To develop in the	student	an appreciation for
	program variable	
Democracy as a form of government.		

STUDY QUESTIONS ACTIVITY I

ENABLING ELEMENT I

I. For each goal, label its components, using the given abbreviations.

b.d. - behavior domain

p.o. - psychological object(s)

p.v. - program variable

A. To assist the (health occupations student) in learning to (identify) the different (types of blood).

B. To develop in the (Occupational Specialist) the ability to (secure) adequate (job placements for students).

C. To improve the (student's) ability to (divide) (whole numbers).

D. To develop in the (teacher) the necessary skills for (writing) valid (test questions).

E. To assist the (student) in learning how to

(identify and use) basic (small hand tools).

II. For each goal, identify its components by filling in the blanks.

A. To develop in the auto mechanic the ability to utilize modern tuning techniques.

1. behavior domain _____

2. psychological object(s) _____

3. program variable _____

B. To assist the food service student in learning how to read a recipe.

1. behavior domain _____

2. psychological object(s) _____

3. program variable _____

C. To familiarize the teacher with the fundamentals of grading tests.

1. behavior domain _____

2. psychological object(s) _____

3. program variable _____

D. To develop in the student the ability to recognize proper nouns.

1. behavior domain _____

2. psychological object(s) _____

3. program variable _____

E. To develop in elementary students the awareness, knowledge and appreciation of the career of a police worker.

1. behavior domain _____

2. psychological object(s) _____

3. program variable _____

III. For each of the following concept , write a goal statement. Use the space provided.

A. teaching students to write whole numbers

Goal Statement:

B. teaching Occupational Specialists to assess guidance services

Goal Statement:

C. instructing elementary students about careers in mechanics

Goal Statement:

D. teaching salesmen about new sales techniques

Goal Statement:

E. instructing teachers in utilizing positive classroom techiniques

Goal Statement:

IV. For each goal written in question III, identify the behavior domain or area, psychological object(s) and program variable.

A. behavior domain or area _____

psychological object(s) _____

program variable _____

B. behavior domain or area _____

psychological object(s) _____

program variable _____

C. behavior domain or area _____

psychological object(s) _____

program variable _____

D. behavior domain or area _____

psychological object(s) _____

program variable _____

E. behavior domain or area _____

psychological object(s) _____

program variable _____

PRE-ASSESSMENT AND DIAGNOSTIC SELF-TESTS

ENABLING ELEMENT II

BEHAVIORAL OBJECTIVES

Identify each of the following behavioral objectives as either appropriate (A) or inappropriate (I) by circling the correct letter. For each behavioral objective you select as inappropriate, rewrite the statement so that it is appropriate.

A or I 5. The student will correctly spell, in writing, a given list of words.

A or I 6. Each student will demonstrate the ability to add and subtract whole numbers by completing a shipping invoice with no more than five errors.

A or I 7. The student will understand woodworking vocabulary.

A or I 8. The student will list, in writing, five ways that the dairy industry helps the community.

ANSWER SHEET FOR ENABLING ELEMENT II

QUESTION	CORRECT ANSWER
5.	I
6.	A
7.	I
8.	A

#5, rewritten: The student will correctly spell, in writing, a given list of words with 75% accuracy.

#7, rewritten: The student will define, in writing, a given list of woodworking vocabulary words with 85% accuracy.

INTERPRETATION

If you correctly answered all four questions, it is not necessary that you complete Enabling Element II, though it will reinforce your skills in this area.

If you did not correctly answer all four questions, you should complete Enabling Element II.

ENABLING ELEMENT II

OBJECTIVE

The objective of this enabling element is: "You will correctly construct a behavioral objective, including the three major components."

In order to meet this objective, you should complete the following activities in sequence.

INSTRUCTIONAL ACTIVITIES

Activity No. 1 - Read and study "The Components of a Behavioral Objective," pages 17 through 19 of this module. Complete the study questions on pages 20 through 22 of this module.

Activity No. 2 - Read and study "Measurable and Observable Verbs," page 23 of this module. Complete the study questions on pages 24 through 25 of this module.

Activity No. 3 - Read and study "Constructing Behavioral Objectives," pages 26 through 27 of this module. Complete the study sheet, pages 28 through 30 of this module.

OPTIONAL INSTRUCTIONAL ACTIVITY

Read and study any or all of the following for reinforcement in writing behavioral objectives.

1. Developing Performance Objectives, Bureau of Research and Evaluation, Division of Vocational, Technical and Adult Education.
2. Preparing Instructional Objectives, Robert F. Mager
3. Using Performance Objectives, Thorwald Esbensen

THE COMPONENTS OF A BEHAVIORAL OBJECTIVE

BEHAVIORAL OBJECTIVE

A statement of exact instructional intent.

A well written behavioral objective must have three components.

A. Expected student behavior - usually determined by a verb - must be measurable and observable.

B. Conditions under which the behavior will occur - time limit, equipment or resources needed may be specified.

C. Criteria by which acceptable behavior will be measured - states the minimum degree of student performance.

In the behavioral objective, "The Occupational Specialist will, given a behavioral objective, identify in writing its three major components with 100% accuracy," the expected student behavior is "identify in writing the three major components (of a behavioral objective)," the condition under which the behavior will occur is "given a behavioral objective" and the criteria is "with 100% accuracy." This is an exact statement of instructional intent in that there is no room for discrepancy; the objective states exactly what is expected of the learner.

EXAMPLES

1. The student will, using a prepared list, match woodworking vocabulary with correct definitions with 80% accuracy.

   student behavior - match woodworking vocabulary with correct definitions.

   condition - using a prepared list

   criteria - with 80% accuracy

2. The student will correctly spell, in writing, a given list of words with 90% accuracy.

   student behavior - spell in writing (a given list of words)

   condition - given list of words

   criteria - with 90% accuracy

3. The student will demonstrate the ability to add and subtract whole numbers by computing a given number of teacher selected problems with 95% accuracy.

   student behavior - add and subtract whole numbers

   condition - given number of teacher selected problems

   criteria - with 95% accuracy

4. The student will write one objective in behavioral terms, including the expected student behavior, specific conditions under which the expected behavior will occur and criteria by which the expected behavior will be measured.

   student behavior - write one objective in behavioral terms

   condition - including the expected student behavior, specific conditions under which the expected behavior will occur and by which the expected behavior will be measured.

   criteria - with no errors

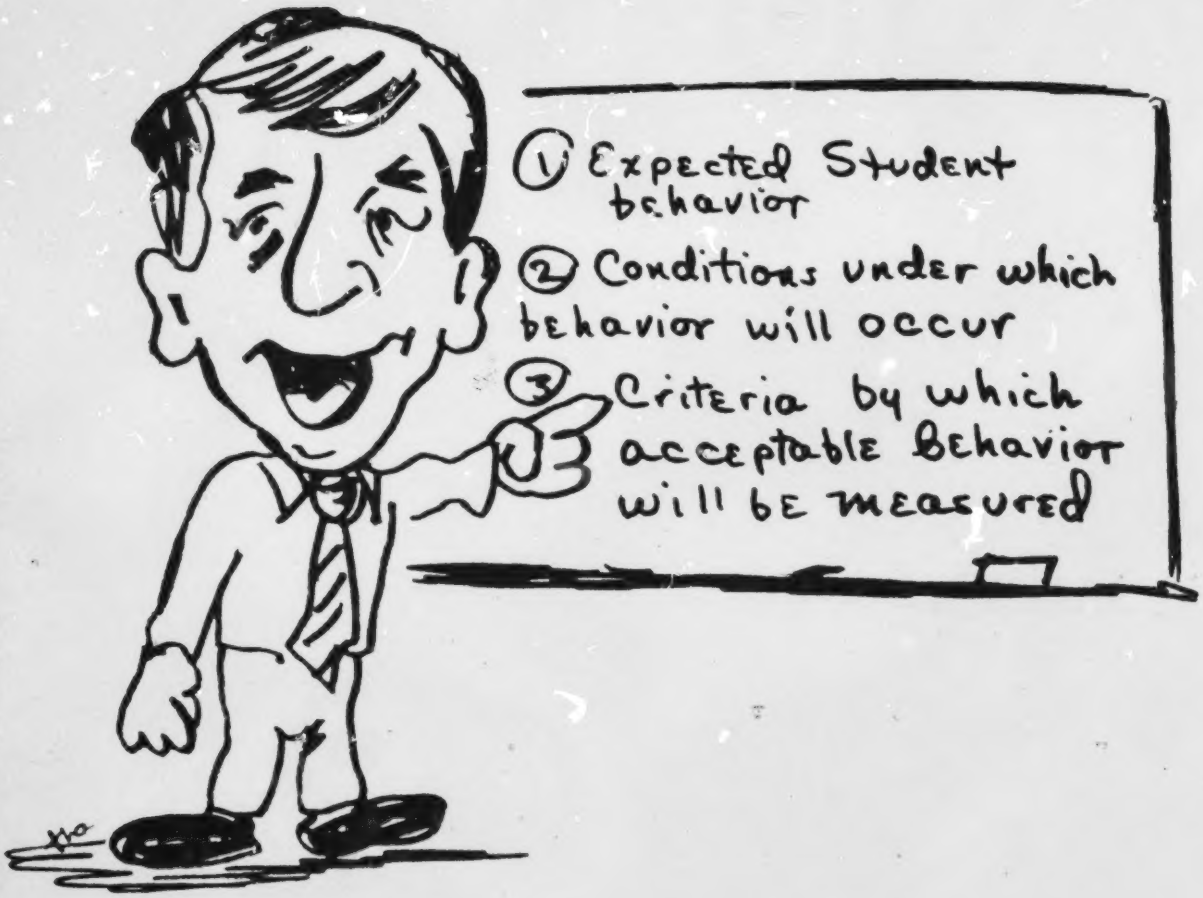
5. The student will orally list the job duties of eight workers in the dairy industry with 80% accuracy.

   student behavior - orally list the job duties of eight workers in the dairy industry

condition - none are stated -
if the behavioral objective is a part of a lesson plan, many times the conditions are implicit within the lesson plan and in particular, the activities. This is acceptable, especially when alternate activities are offered. The secret to omitting the "conditions component" lies in the answer to the question "Is the objective explicit and exact without stating the conditions?"

criteria - with 80% accuracy.

Behavioral Objective -
has these 3 components --


① Expected Student behavior
② Conditions under which behavior will occur
③ Criteria by which acceptable behavior will be measured

Example:

The student will, (condition: using a prepared list,) (student behavior: match woodworking vocabulary with correct definitions) (criteria: with 80% accuracy.)

STUDY QUESTIONS, ACTIVITY 1

ENABLING ELEMENT II

I. For each behavioral objective below, identify each of its three major components by filling in the blanks.

a. The student will, given a word list, match each word with its definition with no more than 3 errors.

expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

b. The student will list 5 duties of a police officer with 80% accuracy.

expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

c. The student will spell in writing a given list of words with 80% accuracy.

expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

d. The student will, given a list of job activities and positions, match each activity with the correct position with 95% accuracy.

expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

e. The student will list 5 situations in which a police officer would be needed.

expected student behavior _____

_____

conditions _____

_____

criteria (be careful) _____

_____

II. Identify each of the following behavioral objectives as either appropriate (A) or inappropriate (I) by circling the correct letter. For each behavioral objective you select as inappropriate, rewrite the statement so it is appropriate.

A or I a. The student will spell a list of words.

A or I b. The student will, given ten sentences, identify without error those which are incorrectly structured.

A or I c. The student will divide fractions.

A or I d. Given a list of verbs, the Occupational Specialist will identify at least ten verbs which are measurable.

A or I e. Given a blank U.S. map, the student will label the states.

"MEASURABLE AND OBSERVABLE VERBS"

In activity 1, the three components of a correctly written behavioral objective were discussed. The first of these components, expected student behavior, usually causes the greatest concern. The primary reason for this concern is the selection of a measurable and/or observable verb. Remember, the verb must be explicit in that it describes in exact terms what type of measurable and/or observable behavior is expected of the learner.

One verb which is often, but incorrectly used, is "understand." How can we measure or observe that a student "understands" a particular concept? The objective, "The student will understand the philosophy of democracy" is vague - it is not measurable or observable. "The student will list the ten major points of the philosophy of democracy, without error" deals with the same concept, but is explicit; it is measurable (if he lists ten, then the student meets the objective) and it can be observed.

Other examples of vague and unacceptable behavior verbs are:

know	appreciate	enjoy
have faith in	be aware of	like

Some examples of explicit and acceptable behavior verbs are:

write	identify	solve
list	recite	compute
construct	illustrate	name
tabulate		

In selecting a behavior verb, if it passes the test "Can I measure or observe it?", then it is acceptable. If it cannot, then it is unacceptable.

Measurable and Observable Verbs

In selecting a behavior verb, if it passes the test "Can I measure or observe it?," then it is acceptable. If it cannot, then it is unacceptable.

STUDY QUESTIONS, ACTIVITY 2

ENABLING ELEMENT II

I. Below are listed a number of verbs. Circle those which would be acceptable behavior verbs for a behavioral objective.

a.	list	k.	match
b.	know	l.	compute
c.	write	m.	agrees with
d.	label	n.	be aware of
e.	identify	o.	construct
f.	appreciate	p.	solve
g.	have knowledge of	q.	illustrate
h.	name	r.	like
i.	understand	s.	enjoy
j.	sees value in	t.	outline

II. Identify each of the following behavioral objectives as either appropriate (A) or inappropriate (I) by circling the correct letter. For each behavioral objective you select as inappropriate, rewrite the statement so it is acceptable.

A or I a. The student will, given a list of terms related to government, be aware of their significance.

A or I b. The Occupational Specialist will, given a list of behavioral objectives, label each as appropriate or inappropriate without error.

A or I c. The student will appreciate the value of first aid training with 75% accuracy.

A or I d. The student will identify without error the type of government for each of a given list of countries.

A or I e. The student will compute without error a given number of algebraic equations.

A or I f. Given a ruler, the student will know each of the major divisions.

A or I g. The student will, given a list of driving habits, identify those which are safe without error.

"CONSTRUCTING BEHAVIORAL OBJECTIVES"

Writing explicit, measurable and observable objectives requires a great deal of experience. However, a number of steps are offered below which should assist you in learning to write acceptable objectives.

1. Using a goal (general statement of instructional intent) divide exactly what the learner must accomplish in order to meet that goal. For example, if the goal is "To develop in elementary students an awareness of the career of policeman," then you might desire the learner to acquire information which has to do with

   a. physical qualifications of a policeman.

   b. entrance requirements of a policeman.

   c. words and terms related to policework.

2. The four ideas above are just that, ideas - they are not explicit. In order to rewrite these ideas into behavioral objectives the information required must be more clearly defined. For instance,

   a. 5 physical qualifications of a policeman.

   b. educational requirements of a policeman.

   c. 3 duties of a policeman.

   d. related words and terms.

3. In order to transform these ideas into behavioral objectives, we must answer three questions.

   a. what verb would best describe desired student behavior? For example, do we want the learner to list, describe in writing, recite, etc., the 5 physical qualifications of a policeman?

   b. what conditions, if any, are necessary to state in the objective? For example, a given list of related words and terms.

c. what criteria are we going to set as minimum requirements? For example, without error, with 75% accuracy.

4. With answers to the above questions, we are now ready to write a behavioral objective for each of the given ideas.

Examples: a. The student will list 5 physical qualifications of a policeman with 80% accuracy.

b. The student will describe, orally, the educational requirements of a policeman without error.

Can you write a behavioral objective for each of the remaining two ideas?

c. _____

_____

_____

_____

d. _____

_____

_____

_____

STUDY SHEET ACTIVITY 3
ENABLING ELEMENT II

I. For each idea given, write a behavioral objective in the space provided.

a. advantages of being a nurse

b. training requirements of a meatcutter.

c. salary of a policeman

d. initial investment of a commercial fisherman

e. vocabulary of horticulture

f. voting requirements

g. duties of a nurse

h. disadvantages of being a teacher

i. writing a behavioral objective

j. activities of a lifeguard

II. For each goal given, write at least three behavioral objectives which are related to the given goal.

a. To develop in social studies students an appreciation for the American heritage.

b. To develop in elementary students an awareness of the career of Occupational Specialist.

c. To assist the auto mechanics student in learning to identify and use basic hand tools.

PRE-ASSESSMENT AND DIAGNOSTIC SELF-TESTS

ENABLING ELEMENT III

DIRECTIONS:

For each question, select the best answer by writing the corresponding letter in the space provided. Check your answers with those provided on page 33 of this module.

( ) 9. In a unit of work, for each behavioral objective there must be at least one corresponding _____

a. goal
b. activity
c. test question
d. a and b only
e. b and c only
f. a, b and c

( ) 10. In a unit of work, each activity must be related to a

a. goal
b. behavioral objective
c. test question
d. a and b only
e. b and c only
f. a, b and c

( ) 11. In a unit of work, each test question must be related to a

a. goal
b. behavioral objective
c. activity
d. a and b only
e. b and c only
f. a, b and c

( ) 12. A unit of work must have which of the following components?

a. goal
b. ideas
c. behavioral objectives
d. activities
e. evaluation
f. a, b, c, d and e
g. a, c, d and e only
h. c and d only
i. c, d and e only

ANSWER SHEET FOR ENABLING ELEMENT III

QUESTION	CORRECT ANSWER
9.	e
10.	b
11.	b
12.	g.

INTERPRETATION

If you correctly answered all 4 questions, it is not necessary that you complete Enabling Element III, though it will reinforce your skills in this area.

If you did not correctly answer all 4 questions, you should complete Enabling Element III.

ENABLING ELEMENT III

OBJECTIVE

The objective of this enabling element is: "You will define each of the following as they relate to a unit of work: goal, behavioral objective, activities and evaluation."

In order to meet this objective, you should complete the following activity.

INSTRUCTIONAL ACTIVITY

Activity 1. Read and study "Units of Work," pages 35 and 36 of this module. Complete the study questions on pages 37 and 38 of this module.

"UNITS OF WORK"

A well developed unit of work has four major components. Secondary elements may be included and will be discussed in Enabling Element IV.

The four major components of a unit of work are: goal, behavioral objectives, activities and evaluation and are define as follows:

goal: statement of general instructional intent.

behavioral objectives: statements of exact instructional intent.

activities: the actual things a student must do in order to meet the stated objectives.

evaluation: a test administered after completion of the unit of work to determine if the student has met the stated objectives.

Not only must these four elements be included in a well developed unit of work, they also must relate to each other. They act together, not separately, to form a unit of work. Their relationship may be described as follows:

goal - acts as the "point of departure" for developing the unit of work. As defined, it is the general instructional intent.

behavioral objectives - derived from the goal, they bring into focus exactly what is expected of the student. They state what the learner must accomplish in order to meet the stated goal. For each behavioral objective there must be at least one corresponding activity and at least one corresponding evaluation question.

activities - this component will be discussed more fully in Enabling Element IV. It is important to remember that every activity must relate back to a behavioral objective.

evaluation - this component will also be discussed more fully in Enabling Element IV. Every evaluation question must, however, relate back to a behavioral objective. The questions must also test the same student behavior stated in the behavioral objective.

STUDY QUESTIONS, ACTIVITY 1

ENABLING ELEMENT III

Identify each of the following statements as either true (T) or false (F) by circling the correct letter. For any statements you select as false, reword the statement so it becomes true.

T or F 1. Goals are statements of general instructional intent.

T or F 2. Behavioral objectives are derived from the activities.

T or F 3. For each goal in a unit of work, there must be at least one corresponding activity.

T or F 4. Activities are the actual things a student must do in order to meet the stated behavioral objectives.

T or F 5. For each behavioral objective there must be at least one corresponding evaluation question.

T or F 6. Evaluation is a test administered after completion of the unit of work to determine if the student has met the stated objectives.

T or F 7. In a well developed unit of work, each of the four major components interact.

T or F 8. The activities act as the "point of departure" for a unit of work.

T or F 9. An evaluation test question may request a different type of student behavior than that stated in the corresponding behavioral objective.

T or F 10. Behavioral objectives are statements of exact instructional intent.

PRE-ASSESSMENT AND DIAGNOSTIC SELF-TEST

ENABLING ELEMENT IV

For each question, select the best answer by writing the corresponding letter in the space provided.

( ) 13. In a true evaluation, each test question must correspond to

a. the goal
b. a behavioral objective
c. an activity
d. all of the above
e. none of the above

( ) 14. Student retention rate would be higher from

a. listening to a lecture
b. seeing and listening to a film
c. seeing a non-audio film
d. reading a story

( ) 15. Activities which are used to provide the "meat" of the lesson are called

a. motivational
b. initial
c. research
d. correlating
e. culminating

( ) 16. A filmstrip may be used as a

a. motivational activity
b. initial activity
c. research activity
d. culminating activity
e. a and b only
f. a, c and d only
g. all of the above
h. none of the above

ANSWER SHEET FOR ENABLING ELEMENT IV

QUESTION	CORRECT ANSWER
13.	b
14.	b
15.	c
16.	g

INTERPRETATION

If you correctly answered all 4 questions, it is not necessary that you complete activities 1, 2 and 3 in Enabling Element IV, though they will reinforce your skills in this area. Activity 4 must be completed, as it is an experience activity.

If you did not correctly answer all 4 questions, you should complete all of Enabling Element IV.

ENABLING ELEMENT IV

OBJECTIVE

The objective of this enabling element is: "You will, given an occupational area, generate, in writing, a Career Education unit of work.

In order to meet this objective, you should complete each of the following activities, in sequence.

INSTRUCTIONAL ACTIVITIES

Activity 1. Read and study "Activities," pages 42 to 44 of this module.

Activity 2. Read and study "Evaluation," page 45 of this module.

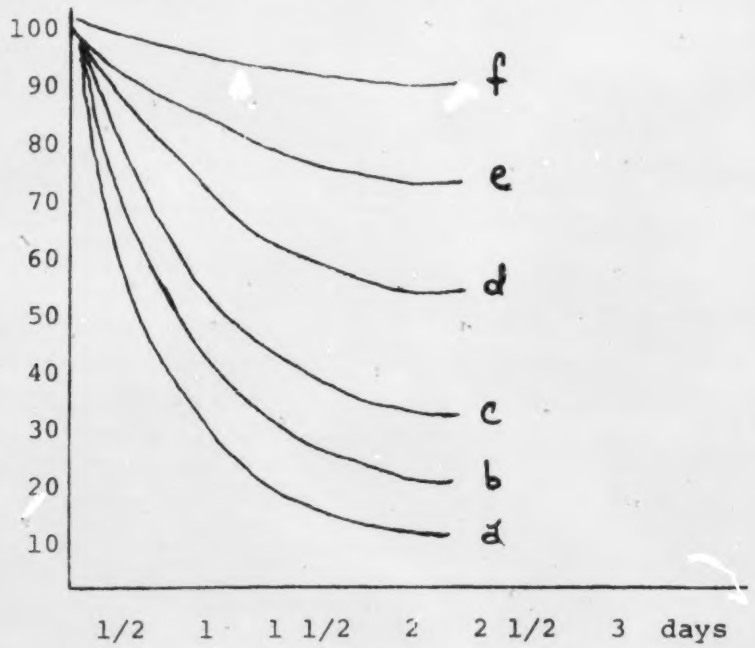
Activity 3. Complete the study questions, "Activities and Evaluation," pages 46 to 48 of this module.

Activity 4. Complete "Steps in Writing a Career Education Unit of Work," pages 49 to 67 of this module. Check with the inservice trainer when necessary.

"ACTIVITIES"

Of the four major components of a unit of work, the activities will most likely determine the success or failure of the lesson. Expose the students to "cut and dried" activities, and the lesson will probably be a flop. Provide meaningful, exciting and varied activities, and a high degree of the learners will meet the stated behavioral objectives. The graph below illustrates this point.

RETENTION RATE OF STUDENTS



TIME

The above graph depicts the retention rate of students as it relates to time and teaching techniques. The following observations may be made:

TEACHING OR LEARNING TECHNIQUE	RETENTION AT THE END OF THREE DAYS
a. student reads	10%
b. student hears (lecture, tape, etc)	20%
c. student sees (demonstration, non-audio film)	30%
d. student sees and hears (audio film, demonstration, etc.)	50%
e. student says something (discussion)	70%
f. student says something while he is doing something (high activity, a hands-on type teaching technique)	90%

CONCLUSIONS:

a, b, c, d are all passive learning situations.
e and f are active learning situations.

SOURCE: Mr. Martin Broadwell, Staff Engineering Training Supervisor, Southern Bell Telephone and Telegraph Co.

The following list of activities have been used with various degrees of success by teachers in career education classrooms. They are rated by a selected group of elementary teachers, with the most successful activity listed first, the least successful last.

1. Hands-on activities
2. Film and record
3. Construction activities
4. Film/video tape/tapes
5. Resource person
6. Role playing
7. Field trip
8. Film loop (without audio)
9. Television production
10. Discussion
11. Slides (narration by teacher)
12. Drama or program for parents
13. Game playing
14. Songs
15. Bulletin board
16. Thank you letters

17. Reading related topics in books, magazines, etc.
18. Creative activities in writing
19. Collecting pictures or newspaper articles
20. Record
21. Write reports

Comparing these activities with the retention graph,it is obvious that the teachers usually rated activities high which also rated well in the retention graph. For instance, both the teachers and the graph ranked hands on activities as the most successful, whereas reading related topics was rated low in both cases.

This does not necessarily indicate that "reading, writing and listening" type activities should be discarded. Rather, the methods should be varied so that the students' senses of learning will be totally reached.

Within a career education unit of work there may be five different types of activities:

1. Motivation Activities - used to arouse interest in the subject.

2. Initial Activities - used to begin developing the subject-such as relating personal experiences or perhaps historical background.

3. Research Activities - used to provide the "meat" of the lesson.

4. Correlating Activities - used to tie-in language arts, mathematics, science, music, social studies, etc., into the lesson.

5. Culminating Activities - culminates the lesson.

Of the 21 activities previously listed, the vast majority may be utilized as either one or more of the five types of activities. For example, a field trip can be an extremely motivating experience, can provide meaningful research information or can culminate a lesson. The manner and place in the lesson in which the activity is presented determines whether it is a motivation, initial, research, correlating or culminating activity.

"EVALUATION"

The technique of writing valid test questions requires a great deal of training and experience. No attempt will be made at this point to provide an indepth analysis of constructing test questions. Rather, it is important that the relationship of the evaluation and the behavioral objectives be fully understood.

Utilization of the following guidelines will help avoid many common pitfalls.

1. For each behavioral objective, there must be at least one corresponding test question.

2. Each test question must correspond to a behavioral objective.

3. Questions must test the same type of student behavior stated in the behavioral objective. For example, if the objective states the student will identify correct sentence structure, a test question cannot validly ask the student to write a sentence using correct structure form.

4. Total utilization of test questions which require recall should be avoided. Such test questions may ask the learner to list, discuss in writing, describe, etc. This does not mean total recall questions should not be used. They may be used effectively if mixed with multiple choice, matching, true-false and fill-in-the-blank questions.

5. Finally, a good test question is meant to evaluate the learner's knowledge. "Trick" questions provide no meaningful evaluation and should be avoided.

6. Lengthy tests should also be avoided. Many youngsters have short attention spans and quickly lose interest in a long, involved test. Consequently, a lengthy test tends to evaluate the learner's attention span rather than his knowledge.

Meaningful, Exciting and Varied Activities

"Hands-on" activities rate as most successful when teaching students.

STUDY QUESTIONS

"ACTIVITIES AND EVALUATION"

For each of the following questions, decide whether the statement is true or false by circling the T for true or the F for false. Rewrite each statement you select as false so that it becomes true.

T or F 1. Students usually retain more from a reading activity than from a discussion activity.

T or F 2. Motivation activities are used to arouse student interest.

T or F 3. A filmstrip may be used only as a research activity.

T or F 4. Culminating activities are used to tie-in language arts, math, science, social studies, etc., into the unit of work.

T or F 5. Each test question must correspond to a behavioral objective.

T or F 6. Reading, writing and listening activities should be totally avoided if possible.

T or F 7. The length of a test is not important.

For each of the following questions choose the best answer by writing the correct letter in the space provided.

( ) 8. Student retention rate would be higher from

a. listening to a lecture
b. seeing and listening to a film
c. seeing a non-audio film
d. reading a story

( ) 9. Student retention rate would be higher from

a. participating in a discussion
b. making something
c. listening to a cassette tape
d. reading a magazine

( ) 10. Which activity would allow for the best retention?

a. students watch demonstration on how to assemble a model airplane.
b. students listen to a tape explaining how to assemble a model airplane
c. students read directions on how to assemble a model airplane
d. students working in pairs assemble a model airplane.

( ) 11. Activities which are used to begin developing the subject are called _____ activities.

a. motivation
b. initial
c. research
d. culminating
e. correlating

( ) 12. _____ activities are used to provide the "meat" of the unit of work.

a. motivation
b. initial
c. research
d. correlating
e. culminating

( ) 13. A field trip may be used as a

a. motivation activity
b. initial activity
c. research activity
d. culminating activity
e. all of the above

( ) 14. Which of the following test questions would be most appropriate for the behavioral objective "The student will identify 5 duties of a police officer."

a. List 5 duties of a police officer
b. Discuss in writing the duties of a police officer.
c. Circle each task listed below which would be a duty of a police officer

"STEPS FOR PREPARING A CAREER
EDUCATION UNIT OF WORK"

The following steps are designed to provide step by step assistance for developing a career education unit of work. Each step should be completed and understood before proceeding.

Step 1 - Select a cluster from the fifteen defined by the U.S. Office of Education. These are:

1. Agri - business and natural resources occupations
   Examples: Forestry, land and water management, fisheries and wildlife, mining and quarrying, petroleum and related products.

2. Business and office occupations
   Examples: Secretary, stenographer, general office clerk, office machine operator, office manager and office supervisor.

3. Communications and media occupations
   Examples: Publishing, photographic reproduction, broadcasting, telephone and telegraph.

4. Consumer and homemaking and related occupations
   Examples: Food service industry, clothing, apparel and textile industry; child care, guidance and teaching; household maintenance services; family and community services and housing design.

5. Construction occupations
   Examples: Contracting, interior designing, grounds maintenance, fabrication and installation.

6. Environment occupations
   Examples: Soil and mineral conservation and control; space and atmospheric monitoring and control; air pollution abatement and control; environmental health services; ornamental horticulture; noise abatement and control; forest ranger; wildlife conservation and control.

7. Fine arts and humanities occupations
   Examples: Performing arts and design, performing arts production and creative writing.

8. Health occupations
Examples: Medical library, science, health maintenance, pediatric care and services, mental health maintenance and medical care.

9. Hospitality and recreation occupations
Examples: Recreation planning, tourism and recreation promotion, group travel services and leisure consumerism programs.

10. Manufacturing occupations
Examples: Model development, foundry operations, machine operations, material handling and recycling operations.

11. Marine science occupations
Examples: Marine animal (zoological) research, boat and vessel operation and shipboard product sorting.

12. Market and distribution occupations
Examples: Wholesale trade, direct selling, exporting, retail trade, purchasing and shipping and delivery.

13. Personal service occupations
Examples: Massage and related services, analyzing and counseling on weight problems, hair styling and mortuary services.

14. Public service occupations
Examples: Coordinating public housing; handling birth, marriage and death records; customs inspection and law enforcement.

15. Transportation occupations
Examples: Vehicle operation, freight service, commercial aviator and marine piloting.

Sample provided is Personal Services.
My choice is _____

Step 2 - Narrow the cluster to a specific career or occupation, i.e., secretary in Business and office; law enforcement in Public Services; the trucking industry in Transportation; the Newspaper Industry in Communications and Media.
Sample provided is Policeman.
My choice of a career or occupation is _____

Step 3 - Determine for which level the **unit** of work will be developed.

Sample: elementary students, grades 1 and 2.
Your choice _____.

Step 4 - Construct a goal statement.

Sample goal: To develop in elementary students an awareness and knowledge of and appreciation for the career of a policeman.

My goal: _____

_____

_____

_____

_____

Step 5 - Research the chosen career or occupation.

Step 6 - List main ideas obtained from research as related to goal statement.

Sample main ideas.

1. There are many careers in police work.
2. Many unfamiliar terms and words exist in police work.
3. Laws are made by the people.
4. Police officers are friends.
5. Police officers have many different duties.
6. Police officers are public servants.
7. There are requirements for being in police work such as physical qualifications.
8. There are many situations in which a police officer would be needed.
9. Laws exist to keep us safe.

10. Most of a policeman's time is spent patrolling the community.
11. Special training is required to become a policeman.
12. The need for organized police systems arose with the growth of cities and the increased population.
13. The duties of police in any country are to preserve the public peace and to protect persons and property.
14. In order to perform their duties, the policemen use many types of transportation and much specialized equipment.
15. Police academics, which include college courses in the curriculum, are a part of police training.
16. Police officers may advance on the basis of experience, education, job performance, training courses and results of written examinations.
17. Police officers work in 3 shifts so that a given area is protected at all times.

My main ideas (use another sheet, if necessary)

Step 7 - Separate main ideas into two groups, (1) those which can be subdivided and you wish to heavily stress in the lesson, (2) those which cannot be subdivided or you do not wish to stress, but still wish to cover (these will be included in the lesson as concepts).

Sample divisions:

Can be subdivided

1. There are many careers in police work.
2. There are many requirements for being a police officer, such as physical qulaifications.
3. Police officers have many different duties.

Cannot be subdivided or do not wish to stress (concepts)

1. There are many situations in which a police officer would be needed.
2. Laws are made by the people.
3. Police officers are friends.
4. Police officers are public servants.
5. Laws exist to keep us safe.
6. Most of a policeman's time is spent patrolling the community.
7. Special training is required to become a police officer.
8. The need for organized police systems arose with the growth of cities and the increased population.
9. The duties of police in any country are to preserve the public peace and to protect persons and property.
10. In order to perform their duties, the policemen use many types of transportation and much specialized equipment.
11. Police academics, which include college courses in the curriculum, are a part of police training.
12. Police officers may advance on the basis of experience, education, job performance, training courses and results of written examinations.
13. Police officers work in 3 shifts so that a given area is protected at all times.

My division: (Use another sheet if necessary.)

Can be subdivided

Cannot be subdivided or do not wish to stress (concepts)

Step 8 - A. Construct career-oriented behavioral objectives to correspond to main ideas which can be subdivided.

Sample career-oriented behavioral objectives:

The students will:

1. list at least 7 careers in police work with 85% accuracy.

2. given a list of duties, identify those related to policemen with 90% accuracy.

3. given a list of physical qualifications, identify those necessary for a police officer with 90% accuracy.

4. list 5 other requirements for being a policeman with 80% accuracy.

Your career-oriented behavioral objectives:

The students will:

B. Then add related academic behavioral objectives in the various disciplines (this process is called "fusing").

The procedure for deciding upon these objectives is as follows:

1. Study carefully the career being considered and the career objectives you have formulated.

2. Determine what academic objectives would relate to the above in each discipline applicable.

Sample Academic Objectives:

Language Arts: Spell a given list of career related terms.

Social Studies: Dramatize the role of a policeman in given situations.

Mathematics: Using a pie chart, illustrate the many different ways a policeman uses his time.

Art: Given necessary materials, construct safety signs for traffic and water.

Continue the process until all feasible disciplines are fused. You may include as many activities as you wish in each academic area.

Your academic behavioral objectives:

The student will:

Step 9 - Subdivide the career-oriented behavioral objectives into subject matter information. This information will be included in "Appendix" (Step 14) to aid the instructor in fulfilling career-oriented activities.

Sample subject matter outline.

A. Careers in police work

1. Uniformed Police Officers

a. Patrolman

b. Morotcycle policeman

c. Public relations person

d. Sheriff

e. Highway patrolman

2. Detective

3. Clerical

a. Clerk

b. Stenographer

c. Teletype machine operator

d. Dispatcher

e. Telephone operator

f. Secretary

g. Public relations person

h. Receptionist

i. Supply officer

j. Bookkeeper

k. Reporter

l. Typist

4. Specialized Services

   a. Rescue boat driver

   b. Rescue van driver

   c. Scuba diver

   d. Helicopter operator

   e. Firearms expert - clean and repair guns

   f. I.D. Department

      (1) Fingerprint expert

      (2) Photographer

   g. Instructor for cadets

   h. Instructor for volunteer police

   i. Magistrate

B. Duties of a police officer

   1. Knows the people, buildings, streets, alleys and empty lots on his "beat."

   2. Gives information to people.

   3. Looks for things which might cause harm to citizens or property, i.e., objects that do not belong on the street or sidewalk (broken street lights, etc.).

   4. Regulates traffic.

   5. Fingerprints people who break the law.

   6. Patrols public places and gatherings.

   7. Helps find lost children.

   8. Controls large groups of people who come together at one time.

9. Night duty

   a. Checks safety locks on doors of business firms.

   b. Checks to see that businesses have proper night lighting.

   c. Patrols homes of people who are away from home.

10. Finds lost objects

11. Holds safety classes for all ages

12. Escorts dignitaries

C. Physical Qualifications of a police officer

1. 21-35 years of age

2. At least 5'8" tall

3. 160 pounds minimum weight

4. Normal eyesight

5. Normal hearing

D. Personality requirements of a police officer

1. Pleasant, easy-going, even tempered, congenial

2. Good judgement in emergency situations

3. Honest, above reproach

4. Emotionally stable

5. Physically strong

6. Mentally alert

7. Well-groomed

8. Mannerly

9. Enthusiastic

10. Good moral character

E. Entrance Requirements

1. Written application

2. Polygraph test

3. Background investigation

4. Oral interview

5. Physical examination

6. One year probation period

7. Advancement through competitive exams

8. Citizen of the United States

9. High school education or the equivalent

Your subject matter outline (use additional sheets if necessary)

Step 10 - Construct activities which will allow the instructor to choose effective methods of presenting materials. You will have to find what A-V materials, books, etc., are available before activities are written. (You may have aids which you wish to include with activities such as handouts, diagrams, narrations for slide presentations, etc. These items may be included in the Appendix following the "Subject Matter Outline; see step 14, page 71.)

Remember: It is suggested that multiple activities be constructed for each behavioral objective. This will provide the teacher with numerous instructional alternatives. In any case, however, there must be at least one corresponding activity for each behavioral objective.

Activities fall into 5 categories:

a. Motivational - designed to create student interest in the career being studied.

b. Initial - designed to introduce student to various aspects of the career (it is into this category that career oriented activities corresponding to career oriented objectives most often fall).

c. Research - designed to allow in depth research and exploration into career field.

d. Correlating - designed to fuse academic materials with career materials under study. Academic objectives (formulated in Step 8) will receive their corresponding activities in this category.

e. Culminating - designed to "wind up" unit.

Sample Activities

A. Motivational Activities

1. Show the filmloop, Policemen and Policewomen. Follow with a class discussion.

2. Visit the police station or sheriff's department. Prepare class for trip by giving them "things to look for."

3. Invite a police officer to class.

B. Initial Activities

1. Collect pictures of policemen doing various tasks. Discuss the varying duties of policemen.

2. Initiate discussion of students' experiences with policemen and policewomen.

3. Relate personal experiences with policemen and policewomen.

4. Discuss projected pictures.

5. Tell about a relative or friend who is a police officer.

6. Discuss various careers in law enforcement.

7. Explain qualifications for becoming a policeman.

C. Research Activities

1. Build a police car in the classroom. (model)

2. Have a police officer come to the school and bring his patrol car.

3. Look for books about police and safety.

4. Build a rescue mobile unit. (model)

5. Set up a model city and include police officers and their activities.

6. Make a booklet about police officers and their safety activities and the equipment they use.

D. Correlating Activities (Should be added by classroom teacher(s))

1. Language Arts

a. Learn to spell the following list of words.

policeman
policewoman
officer
beat
boat
patrol
patrolman
stop
go
organization
yield
caution
walk
duty
horn
equipment
wait
don't walk
gun
whistle
hat
badge
car
motorcycle
bicycle
red-yellow-green
sheriff
rule
water
boats
identify
department
cadet
dispatcher
traffic
sidewalk
playground
helicopter
safety
law
finger print
obey
rescue
citizen
ordinance

b. Role playing

(1) Teletrainer

(a) Learn phone numbers and addresses.

(b) Learn the phone number of the police station.

(c) Practice making calls in specific situations.

(d) Discuss when to call a police officer.

(2) Dramatize stories about policemen.

c. Games

(1) Play "What's Missing?"

(2) Match police officers with equipment.

d. Discuss qualifications of a good police officer.

e. Discuss situations when a policeman would be needed.

f. Invite experience stories.

g. Poems

(1) "Stop-Go"

(2) "My Policeman"

2. Math

a. Solve simple addition and subtraction problems.

b. Use the bar graph to show height, weight and age (measuring activity).

c. Use pie chart to illustrate the many different ways a police officer uses his time.

d. Solve simple problems involving mileage and gas.

e. Teach symbols for "greater than" and "les than."

3. Social Studies

a. Discuss the role of the police officer as related to safety.

b. Study map.

c. Discuss the role of a law-abiding citizen.

d. Role Playing

(1) Dramatize the role of a police officer.

(2) Dramatize the role of a child in aiding a victim.

e. Discuss safety rules and violations.

f. Identify equipment used by the police officer from a picture on the opaque projector.

g. Role play using traffic signs.

h. Change the endings of stories and use police officers.

(1) Three Billy Goats Gruff

(2) Little Bo Peep

(3) Humpty Dumpty

(4) Little Red Riding Hood

i. Complete a given situation in story form.

4. Art

a. Dot-to-Dot

b. Safety signs for traffic and water

c. Types of police equipment using

(1) Construction paper

(2) Mobiles

(3) Collages

(4) Posters

(5) Clay

(6) Plaster or soap sculptures

d. Display pictures of policemen/women and their roles.

e. Illustrate experience stories.

5. Music

a. Frank Luther's "Songs of Safety" record

b. Y.P.R. "The Men Who Came To Our House," "Let's Be Policemen"

c. "The Policeman" by Sadie Garnett

d. "The Traffic Man," The American Singer

E. Culminating Activities

1. Students divide into small groups and role play the police officer and his activities.

2. Show and discuss slides taken during the unit.

3. Take a field trip to the Police Department.

4. Display posters for contest.

5. Discuss new information.

6. Review important information.

7. Choose words for spelling and/or word recognition.

8. Write "thank you" notes.

9. Draw pictures of signs.

10. Identify

a. Traffic signs

b. Equipment

c. Uniform-badges

d. Duties of police officers

e. Qualifications of police officer

Your activities: (You may need to use additional sheets of paper.)

Step 11 - List materials needed for each activity

Sample Materials Needed:

For Initial activity #1, the students would need scissors, and old magazines.
For Research activity #1, a large refrigerator carton, an instrument for cutting cardboard and paint would be needed.

Materials needed for each of your activities:

Step 12 - Construct student evaluation. Remember, each behavioral objective must be tested.

Sample Test

A. Career Related

1. List at least 7 careers in police work.

2. Identify those duties listed below which a policeman may do.

   a. regulate traffic
   b. drive a fire truck
   c. check locks on doors of business firms
   d. find lost children and objects
   e. deliver mail
   f. hold safety classes
   g. given information to people

3. Identify those physical qualifications listed below which a policeman must have.

   a. 21-35 years of age
   b. very strong
   c. normal eyesight
   d. 160 lbs minimum weight
   e. normal hearing

4. List five requirements for being a police officer.

B. Academic

1. Call out at least 10 words listed in Language Arts.

Your test questions:

Step 13 - Add bibliography: books, records, films, filmloops, filmstrips, poems, songs, etc., should all be included, as well as, where they can be obtained.

Sample Bibliography

A. Books

1. Leaf, Munro, Safety Can Be Fun. Philadelphia and New York: J.B. Lippincott, 1961.

2. Miner, Irene, Policemen and Firemen. Chicago: Children's Press, 1954.

3. Robinson, Barry; Dain, Martin, On The Beat: Policemen at Work. New York: Harcourt, Brace and World, 1968.

4. Scarry, Richard, Best Story Book Ever. New York: Golden Press, 1968.

B. Pamphlets

1. Police Careers, Career Services, The Institute for Research.

C. Records

1. Dove, Percy; Anderson, Ralph; Mohaupt, Richard, Let's Be Policemen. New York: Young People's Records, Children's Record Guild, Project Library.

D. Films (Available at the Orange County Media Center)

1. Police Workers, 15 minutes, color, Orange County Media Center, #6751.

Your Bibliography: (Use additional paper, if necessary.)

Step 14 - Add Appendix: This will include, "Subject Matter," Appendix I and "Concepts," Appendix II, (Refer to Step 7).

Any additional aids for activities which might assist teacher or student in presenting and digesting materials may be incorporated into the appendixes. Be sure to label each appendix with corresponding activity number.

Step 15 - Pull together all information into outline form. Suggested format is as follows:

I. Goal and Objectives

A. Goal: (Step 4)

B. Behavioral Objectives
The student will:

(Step 8)

II. Activities (Step 10)

III. Materials (Step 11)

IV. Evaluation (Step 12)

V. Bibliography (Step 13)

VI. Appendix (Subject Matter, concepts, additional aids) (Step 14)

POST ASSESSMENT

1. For each of the following concepts write a goal statement. Use the space provided.

   a. teaching occupational specialists to identify potential early school leavers.

      Goal Statement:

   b. instructing students in adding fractions.

      Goal Statement:

   c. providing elementary students with information on careers in education.

      Goal Statement:

2. For each goal written in question 1, identify the behavior domain or area, psychological object(s) and program variable.

   a. behavior domain or area _____

      psychological object(s) _____

      program variable _____

   b. behavior domain or area _____

      psychological object(s) _____

      program variable _____

c. behavior domain or area _____

psychological object(s) _____

program variable _____

3. Identify each of the following behavioral objectives as either appropriate (A) or inappropriate (I) by circling the correct letter. For each behavioral objective you select as inappropriate, rewrite the statement so it is appropriate.

A or I a. The student will become aware of the trucking industry.

A or I b. The student will spell a given list of related words with 90% accuracy.

A or I c. The student will identify improper verb usage in given sentences.

A or I d. Given a blank organizational chart, the student will correctly fill-in the blanks with 80% accuracy.

4. For each behavioral objective given or rewritten in question 3, identify the expected student behavior, conditions and criteria.

a. expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

b. expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

c. expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

d. expected student behavior _____

_____

conditions _____

_____

criteria _____

_____

5. Complete each statement by filling-in the blank.

   a. In a unit of work, for each behavioral objective there must be at least one corresponding _____.

   b. In a unit of work, each activity must be related to _____.

   c. In a unit of work, each test question must be related to a _____.

   d. A _____ is a statement of general instructional intent.

   e. _____ are the actual things a student must do in order to meet the stated behavioral objectives.

   f. In a well developed unit of work, each of the four major components _____.

   g. _____ are statements of exact instructional intent.

6. For each of the following questions, choose the best answer by writing the correct letter in the space provided.

( ) a. Student retention rate would be higher from

   a. reading a story.
   b. listening to a lecture.
   c. seeing a non-audio film.
   d. making something.

( ) b. Student retention rate would be higher from

   a. reading a magazine.
   b. participating in a discussion.
   c. listening to a cassette tape.
   d. listening to a lecture.

( ) c. Which activity would allow for the best retention?

a. watching a demonstration
b. reading directions on how to make a bookcase
c. listening to a tape explaining how to make a bookcase
d. working in a group actually making a bookcase

( ) d. Activities which are used to provide the "meat" of the lesson are called

a. motivation
b. initial
c. research
d. correlating
e. culminating

( ) e. Activities which are used to begin developing the subject are called _____ activities.

a. motivation
b. initial
c. research
d. culminating
e. correlating

( ) f. Which of the following test questions would be most appropriate for the behavioral objective "The student will list at least three advantages of being a truck driver."

a. discuss in writing the advantages of being a truck driver
b. list at least three advantages of being a truck driver
c. identify from a given list, those advantages related to being a truck driver
d. list at least five advantages of being a truck driver

( ) g. A properly constructed evaluation

a. tests each behavioral objective
b. tests the same type of student behavior stated in the behavioral objective
c. utilizes a great deal of total recall questions
d. considers the attention span of the learner

e. a and b only
f. a and d only
g. a, b and d only
h. a, b, c and d

ANSWER KEY FOR SELECTED STUDY
QUESTIONS AND POST ASSESSMENT

STUDY QUESTIONS, ACTIVITY 1
ENABLING ELEMENT 1
Pages 10-13

I. A. "health occupations student" - p.o.
"identify" - b.d.
"types of blood" - p.v.

B. "Occupational Specialist" - p.o.
"secure" - b.d.
"job placements for students" - p.v.

C. "student's" - p.o.
"divide" - b.d.
"whole numbers" - p.v.

D. "teacher" - p.o.
"writing" - b.d.
"test questions" - p.v.

E. "student" - p.o.
"identify and use" - b.d.
"small hand tools" - p.v.

II. A. 1. b.d. "ability to utilize"
2. p.o. "auto mechanic"
3. p.v. "modern tuning techniques"

B. 1. b.d. "read"
2. p.o. "food service student"
3. p.v. "recipe"

C. 1. b.d. "fundamentals of grading"
2. p.o. "teacher"
3. p.v. "tests"

D. 1. b.d. "recognize"
2. p.o. "student"
3. p.v. "proper nouns"

E. 1. b.d. "awareness, knowledge and appreciation"
2. p.o. "elementary students"
3. p.v. "career of a police worker"

III. Examples

A. To develop in the student the ability to write whole numbers.

B. To assist the occupational specialist in learning to assess guidance services.

C. To develop in elementary students an awareness of careers in mechanics.

D. To provide salesmen with the necessary skills in utilizing new sales techniques.

E. To develop in teachers the ability to utilize positive classroom techniques.

STUDY QUESTIONS, ACTIVITY 1
ENABLING ELEMENT II
Pages 20-22

I. a. expected student behavior - "match each word with its definition"

conditions - "given a word list"

criteria - "no more than 3 errors"

b. expected student behavior - "list 5 duties of a police officer"

conditions - "none given"

criteria - "with 80% accuracy"

c. expected student behavior - "spell in writing"

conditions - "given list of words"

criteria - "with 80% accuracy"

d. expected student behavior - "match each activity with the correct position"

conditions - "given a list of job activities"

criteria - "with 95% accuracy"

e. expected student behavior - "list 5 situations in which a police officer would be needed"

conditions - "none given"

criteria - "list 5" (This indicates if 5 or more are listed, the objective is met).

II. a. I "The student will spell a given list of words with 70% accuracy."

b. A

c. I "The student will divide a given number of fractions without error.

d. A

e. I "Given a blank U.S. map, the student will label the states with no more than 4 errors.

STUDY QUESTIONS, ACTIVITY 2
ENABLING ELEMENT II
Pages 24 and 25

I. Acceptable verbs - a, c, d, e, h, k, l, o, p, q, t.

II. a. I "The student will, given a list of terms related to government, discuss in writing their significance.

b. A

c. I "The student will list at least 5 values of first aid training with 75% accuracy.

d. A

e. A

f. I "Given a ruler, the student will identify each of the major divisions without error.

g. A

STUDY QUESTIONS, ACTIVITY 1
ENABLING ELEMENT III
Pages 37 and 38

1. T
2. F
3. F
4. T
5. T
6. T
7. T
8. F
9. F
10. T

STUDY QUESTIONS, ACTIVITY 3
ENABLING ELEMENT IV
Pages 46-48

1. F
2. T
3. F
4. F
5. T
6. F
7. F
8. b
9. b
10. d
11. b
12. c
13. e
14. c

ANSWER KEY FOR POST-ASSESSMENT
Pages 72 to 77

1. Example Answers

   a. "To provide occupational specialists with the necessary skills for identifying potential early school leavers."

   b. "To develop in the students the ability to add fractions."

   c. "To develop in elementary students an awareness of careers in education."

2. Answers vary according to responses to question number 1.

3. a. I
   b. A
   c. I
   d. A

4. Answers will vary.

5. a. activity - test question

   b. a behavioral objective

   c. a behavioral objective

   d. goal

   e. activities

   f. interact

   g. behavioral objectives

6. a. d
   b. b
   c. d
   d. c
   e. b
   f. b
   g. g